



Spring 2018





This postcard scene is postmarked 1913, but probably dates from about 1910. Because it was the meeting place for the Main Line and Lake Line cars, Center Street featured the longest stretch of double track in the system.

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The Minnesota Streetcar Museum operates the Como-Harriet Streetcar Line in Minneapolis and the Excelsior Streetcar Line in Excelsior. Its mission is to preserve Minnesota's electric railway heritage.

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Streetcars in small cities

Streetcars appeared because they were needed. Cities grew to the point that everything was no longer within walking distance. Owning and storing a horse, or a horse and carriage, was more than most urban residents could afford. That gave rise to shared public transportation.

Within Minnesota, streetcars in Minneapolis-St. Paul and Duluth were a no-brainer, due to large land areas and 1900 populations of 202,718 (Minneapolis), 163,065 (St. Paul) and 52,969 (Duluth). But what about the small cities? From largest to smallest, here are their populations in 1900.

28,895	La Crosse
19,714	Winona
17,517	Eau Claire
14,240	Stillwater, South Stillwater (Bayport)
13,319	Fargo-Moorhead-Dilworth
10,599	Mankato
10,391	St. Cloud-Waite Park-Sauk Rapids
9,759	Grand Forks-East Grand Forks
7,524	Brainerd
6,843	Rochester
3,510	Wahpeton-Breckenridge
3,319	Bismarck
2,481	Hibbing
1,000 (est.)	International Falls

Although those populations increased in later years, it appears that at least 10,000 was the minimum to sustain a streetcar operation. During the streetcar era, Winona was the most populous Minnesota city after the Twin Cities and Duluth. That population stayed steady through the 1930s.

Of the group with less than 10,000

population, Brainerd had streetcars for only a few years in the 1890s. Rochester never had them. Bismarck's line was government owned and subsidized. Hibbing was also a special case, due to moving the entire town of Hibbing. International Falls was very short-lived. The only viable exception to the 10,000 rule was Wahpeton-Breckenridge, where a 1-mile line somehow lasted until 1925.

Winona

-Clarence J. Vincent

Editor's note: The late Clarence Vincent was the streetcar historian of Winona and La Crosse. Thanks to the Winona County Historical Society, his detailed history of the Winona system has been preserved and is reproduced here, including the roster tables.

Horse Cars

Public spirited citizens including John A. Mathews, B. H. Langley, C. H. Porter, R. D. Cone, Charles Horton, C. L. Bonner and T. T. Hayden deemed it necessary that a horsecar railway system be built since Winona was in dire need of public transportation. This group obtained a franchise from the Winona city council on May 1, 1883 to build two streetcar lines. The Main or long line would run from west to east from the Winona Wagon Works in the west end of town at the West Fifth street crossing of the Chicago, Milwaukee and Saint Paul Railroad to the eastern terminus on East Third street at Chatfield street near the mill of the Winona Lumber Company. The crosstown or Depot line would run from south to north on Center Street, beginning at the Milwaukee Road

depot at Mark street to the Chicago Northwestern (Winona & St. Peter) Depot on Second at Huff street. The system was named the Winona City Railway.

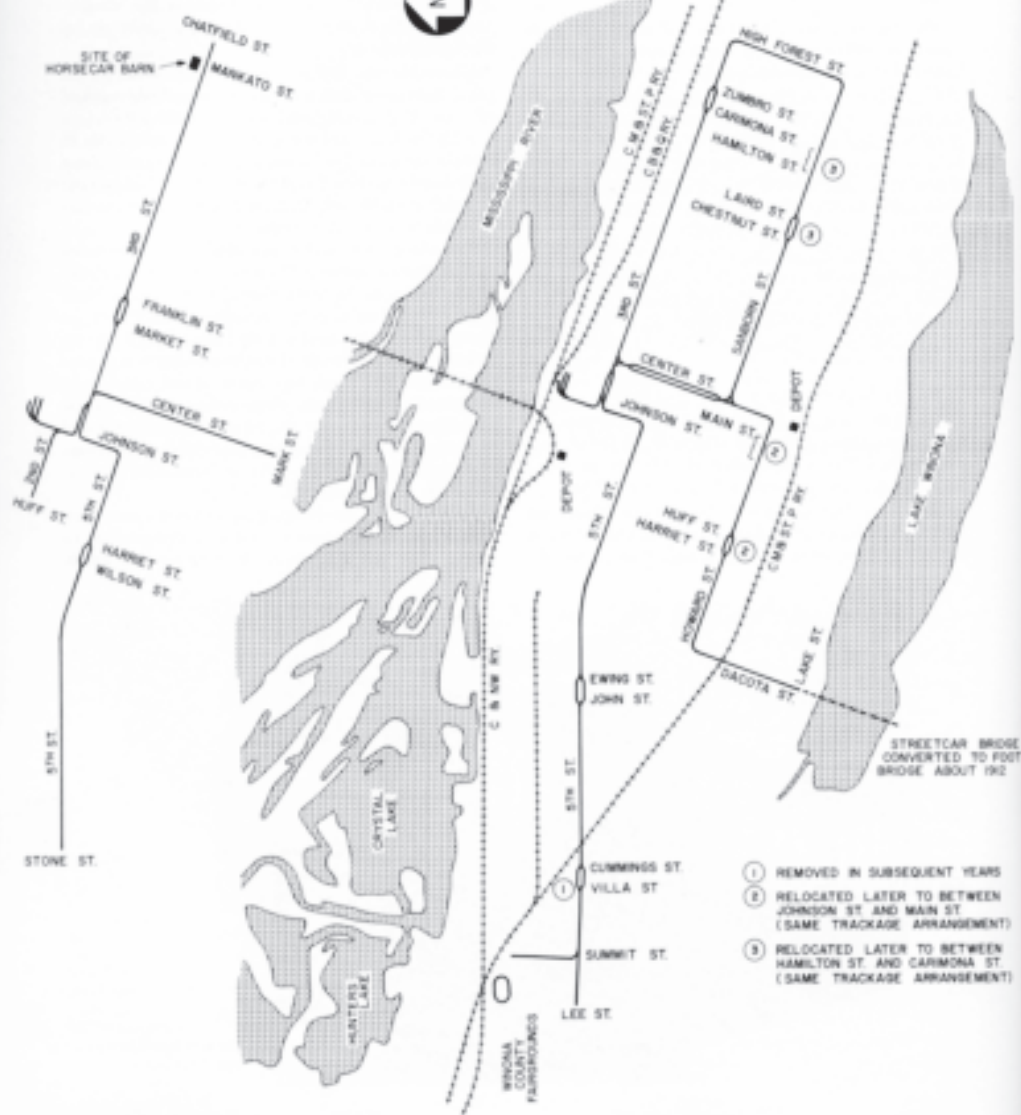
The Daily Republican maintained an almost daily running account of construction progress, such as the September 21st report: "Ground was broken for the street railway yesterday afternoon on West Fifth street in front of the Winona Wagon Works office. After about an hour's work, however, the rain storm compelled a suspending of operations until this morning when Mr. W. A. Gordon started his force of men at work again and at noon today about a block was spanned by the ties and stringers. Some disappointment is felt at the non-arrival of the iron rails, which are daily expected. When they are received the work of laying the track will proceed at the rate of twelve hundred feet per day."

October 1st, 1883: "The iron rails for the street railway are beginning to arrive. Two loads are now here and more coming. The company has ordered 8 street cars for passenger service from Brownell and Wight and they are now being built in St. Louis, Missouri. The Main line will have 6 cars numbered from 1 to 6, painted coach color or canary yellow and lettered: "East Third, Post office and West Fifth Street". The Crosstown line will have 2 others, numbered 7 and 8 with the main body painted canary yellow and cardinal panels under the windows to distinguish them from the cars of the Main line. They will be lettered: "Depots, Post office and Hotels". The cars are to be double-enders with ventilating roofs. The seats are to be perforated natural wood and the ceil-

This special issue celebrates the rebirth of Winona streetcar #10, following a 14-year restoration that converted it from an empty car body to a beautiful operating artifact. That's the Mississippi Valley Public Service Co. logo on the front cover. Front cover: Winona 10 at the Excelsior Streetcar Line Water Street platform during test operations. Jeff Terry photo.

WINONA CITY RY.
1894

WISCONSIN RY.
LIGHT & POWER CO.
WINONA, MINN.
1-1916



A Winona horse car. For more info, see Twin City Lines Summer 2012, the horsecar issue. Winona County Historical Society collection.

ings are also to be of natural wood varnished. Each car will be 12 feet long and capable of seating 16 persons. The contract calls for the completion by November 15th but the company hopes to get them by the First of November."

October 8th: "The public interest in the street railway was shown in a marked degree on Sunday. The track is now laid from the Wagon Works to the east side of the First Ward Park (Huff Street). Taking advantage of the balmy air for a walk the people found Fifth street along the line of the new railway a pleasant stroll. The sidewalks were pretty well thronged with old and young and in the absence of a chance to ride the street cars the public availed themselves of a

free pass to walk over the line.

The construction in this soil, free from rocks and stones, is easy and rapid. Ties of pine, about 5"x6" square are embedded in the ground, and on these are placed the stringers, also of pine about 4"x6", which are braced on the ties by small pine triangular blocks. The rail is a long flat bar, with a 'shoulder', thru which the spikes are driven. The track is laid even with the surface, the street crossings being well planked as the work progresses. About three blocks a day are being laid and with all possible dispatch, fully realizing that the present weather is their harvest time. The people are already impatient to see the cars and are anxiously inquiring if they will be running as soon as the main line is completed from the western end to the eastern

end of the city."

Oct. 10th: "The street railway track was being laid in front of the Republican office today (Corner Third and Center)."

Nov. 24th: "The first installment of street cars for the street railway arrived at the Milwaukee Road Depot this morning, being the two that were shipped from St. Louis on Monday. They came enveloped in oil cloth, which tended to increase the curiosity of the crowd that gathered around the flat car on which they were situated as efforts were made to get a glimpse of the first street cars ever brought to Winona. They are numbered 7 and 8 respectively on the end boards. A more minute inspection will be made when their overcoats come off. It is reported this forenoon that a trial trip of the street cars will be made over the track this afternoon."

Later — "At 2 o'clock this afternoon the first street car came down Center street and proceeded down Third street attracting general attention from the crowds of people on the sidewalks as it proceeded on its way to the car house and stables in the 4th ward. This was followed in a short time by the second car."

While the tracks were being built, the horse stables and car house were also being completed at the southeast corner of Third and Mankato Avenue. The stable was a two story building 54'x90' in size with 36 single stalls with a capacity of 36 horses. The car house was a one story building 30'x100' in size having a transfer table, shops and a capacity of 14 cars. Eight horse cars, numbered 1 through 8, were built by Brownell and Wight of Saint Louis, Missouri for the street railway. All of the cars had arrived by Thanksgiving Day.

Because of a heavy snowstorm Christmas Eve, the first day's opera-

tion on Christmas Day was somewhat hampered and the inaugural runs were limited to a portion of one line from which the snow had been removed. The horse cars operated from the Winona City Railway Company stables at East Third and Mankato Avenue to the Wagon Works on West Fifth street. Because of the snow, however, most of the first trips were made only from the Post Office downtown to the East End terminal although one car managed to buck through the snow along the entire length of the line. The horse cars were received with great enthusiasm and on the first few days of operation the cars were filled to capacity on each trip.

The crosstown street car line was opened on December 29th in time to meet the early trains. A few days later the newspaper carried this information: "The improvement represents an outlay of \$40,000. The cars have been well patronized from the beginning exceeding the optimistic expectations and at once taking an assured place as one of the most valuable enterprises yet inaugurated for the development of the city of Winona."

The horse cars were each drawn by one horse hitched to the car with rope or leather tugs. The horses all carried a bell so the approaching cars could be heard by patrons. The front platforms on these first horse cars were open and unprotected so on cold wintery days the drivers wore heavy fur coats, overshoes and mittens standing ankle deep in hay on the floor. The nickel fare was dropped into a box on the front platform as the passenger boarded. The only way passengers in the early days of operation could keep warm in winter was to bundle up well and keep their feet in the straw that covered the floor thoughtfully furnished by the streetcar company. Since there were no stoves in the cars the windows would

completely frost over. A passenger wishing to determine how near he was to his destination scratched a clear place on the pane. Seats ran the length of the car on each side and illumination was by kerosene lamps mounted at each end of the car. Each horse was changed after each round trip from the stables on East Third to the Wagon Works on West Fifth and return.

Operators for the horse cars worked from 6 am until 10:30 pm for five days with the sixth day off. At the close of each day's run, the driver had to return to the car barn to wash his car.

Equipment was added until the company owned 10 horse cars and 36 horses, and by 1888 the company was operating seven cars, six on the main line and one on the short line, over 4.82 miles of 3' 6" gauge track. In order to accommodate six cars on the main line, the turnouts were in the block between Zumbro and Carimona, a one block turnout centered between Liberty and Franklin and a two block turnout between Center and Johnson on Third street. Also two turnouts on West Fifth street, a one block turnout between Harriet and Wilson and another in the block between Ewing and John streets. In Winona the word switch was used instead of turnout to describe or designate a siding or passing track.

Electrification

The horse car system continued to serve Winona until electrification was undertaken in 1891 beginning with the removal of the Center street and the East Third street tracks in the first week of October. The next week saw the start of laying heavier rail to standard gauge and setting of poles on Center street. About this time A. K. Stearns, engineer of the railway construction department of the Thomson-Houston Electric Company which controlled the stock of the Winona street

railway made the announcement that electric street railway cars would be running on the streets of Winona by January 1, 1892.

In the meantime the power plant was being set up in the Fibre Works building with the arrival of a seventy-five horsepower electric generator from the Ball Engine Works of Erie, Pennsylvania. An order for five single truck electric cars, having a 16-foot body and 8 feet additional devoted to platform space, had been placed earlier in the year with the Northern Car Company of Robbinsdale, Minnesota for delivery in the latter part of December. An order for a single truck snow sweeper also had been placed with the McGuire-Cummings Company at Paris, Illinois.

The new rails duplicated both the depot line and the main line of the horse car system with a revision of the turnouts on the main line. The new turnouts were placed between Franklin and Market streets and between Harriet and Wilson streets allowing three cars to operate on the line.

In operating the cars, the power is received from the overhead wire through a thirteen foot trolley pole to the motors on the axles of the car. There were two men assigned to each car, a "motorman" and a conductor, the former to drive the car and the latter to collect fares and attend to the trolley which included changing the trolley from one end to the other at the end of the line.

The electric system gave the advantage of a speed of from 8 to 15 miles an hour being easily attained where 4 to 8 miles an hour by other methods of transportation were only attained upon special occasions.

A formal invitation was issued to the Mayor and the City Council members to attend the opening of the



One of two open cars in the fleet navigates a circus parade in downtown on 3rd Street at Center Street during the 1890s. Winona County Historical Society collection

Winona City Railway by electric power on Jan. 21, 1892.

Four of the five cars, which had been ordered from the Northern Car

Company, arrived about the middle of January over the Milwaukee and St. Paul railroad. They were described as very handsome, being painted a wine color with gilded lettering and numbers, finished inside in hard maple wood and provided with stoves and ceiling lights. These first five cars were numbered 10 thru 14. An announcement was made that three cars would

be operated on the long line and one car on the short line.

After several postponements, the first electric street cars were placed in service on January 21, 1892. Lack of trained personnel permitted the operation of only two cars on the inaugural runs, but a third car was added when the training of motormen and conductors had been completed. Shortly after

2 pm car 12, decorated with flags and bunting, came grandly up Third street and stopped in front of Slade's Drug Store at Main street. There, Mayor Michael Toye, Council President John Keenan, other members of the City Council and Senator J. A. Tawney boarded the car. Frank Wood, a St. Paul motorman, who had been brought to Winona to train the motormen and conductors, directed the first day's operation.

The westward trip to the Wagon Works took ten minutes and was considered a triumph, but the return trip was marred. When the car reached Center street one of the switches failed to operate and the dignitaries could not be taken over the short line. Several hours later the switch was again operable and car 12 made a trip to the Milwaukee depot. The cars ran very easily and smoothly and the dignitaries were satisfied that Winona now had a first class electric railway.

Regular scheduled service began the following day at 6 am operating until 11 pm daily. The short line was not put into operation until the arrival of the fifth car because three cars were used on the main line and the fourth was kept in reserve in case of accidents. Howard C. Levis, Vice-president of Thomson-Houston Electric Co. on his visit to Winona to inspect the electric street railway, was very much pleased with its working and glad to hear of the general satisfaction with the road. He remarked that it will be the aim of the company always to give Winona first class street railway service and that as soon as the business of the road warrants it, more cars will be put in service on the main line. He also stated that it was the intention of the company to provide open electric cars for the summer traffic which would be a most welcome innovation in Winona. The announcement was also made of the

increase in the capital stock of the Winona City Railway to \$100,000.

The snow sweeper for the street railway arrived on the Milwaukee and St. Paul railroad at the west Fifth street crossing. It was unloaded and taken down over the tracks to the car barn, February 3, 1892. The newspaper account called the sweeper an odd looking machine in shape somewhat resembling a small boat.

The first head-on collision on the electric line, of which there were a number down thru the years, took place the evening of February 27, 1892 at the switch near the first ward park. The westbound car did not take the switch and instead of following the turnout continued straight ahead and came into violent contact with the east bound car. No great damage was done to either car but a lady passenger fainted away. A number of similar derail-

ments followed this incident until the motormen mastered the method of slowing the car to a speed that the car would enter the turnout without jumping the track.

In May the streetcar company received a letter from the chief engineer of the Thomson-Houston Company at St. Paul with the information that "on account of the destruction by fire of the Northern Car Company's shops at Robbinsdale the two open cars which were nearly completed for the Winona City Railway Company have been destroyed and cannot be replaced within 60 days."

Also at this time the company had announced it intended to extend the car line but no decision had been made as to the route or routes. This would have to await the completion of the light, heat and power plant the grant of which was recently conferred by the

city council. The area at Front and Johnson streets was picked as the site for the new plant, according to George C. Duffie, secretary of the Northwest General Electric Co., the new name by which the consolidated Edison and Thomson-Houston companies were known in the Northwest.

Heretofore the lighting and street railway interests had been kept separate, but now they would be under one roof, as the Winona Light Company was a branch of the Northwest General Electric Co. The small building of Winona Light at the southeast corner of Front and Johnson was made part of the large structure. The building (which still stands in 2018) has a frontage of 140 feet on Johnson street and 92 feet on Front street, the part occupied as a car barn extending back 16 feet further on the east side. The building was divided into three sec-

tions, all one story high. On the south side was the car barn, opening on Johnson street, 42 feet wide and 108 feet long. The central section was the boiler room, 48 by 92 feet in size and the north section the engine and dynamo room also 48 by 92 feet in size. The floor of the boiler room is lower and the roof higher than the other two sections. The building is of brick with a tar and gravel roof.

The boiler room had a flagstone floor and was equipped with two large upright Hazelton boilers of 250 hp each and three horizontal tubular boilers of 80 hp each, together with a condenser of 300 horse power. The engine room was equipped with four water pumps for feeding the boilers, two compound condensing Ball and Wood engines of 200 hp each, one Buckeye engine of 200 hp, one Ide engine of 200 hp, one single cylinder Ball engine of

The carbarn was located on non-revenue track at Front Street and Johnson Street. The building still stands today. Both photos look southwest from slightly different vantage points. The left photo shows the barn. The right photo looks up Johnson Street, showing tracks curving into the barn. Winona County Historical Society collection.





These two photos showing the earlier generation of streetcars date from about 1908. Car 21 was a 1906 McGuire-Cummings product. Car 16 appears to have been rebuilt in 1908 from 1893 open car #1.



80 hp, two 86 hp revolving generators, three alternators and one 40 hp generator for lighting purposes. The Ide and Ball engines were used for street railway purposes.

One use to which the exhaust steam was put was the heating of the Winona and Schlitz hotels and the Winona Opera House with an eight inch underground steam pipe connecting these buildings.

The car house had two tracks the entire length of the building and the third halfway, the rear section being taken up with a repair shop. There were pits under the front half of these tracks for working on the undercarriage of the cars. The barn at the time of construction had a storage capacity of eleven cars. Only a few of the old cars were stored in the old car barn, by then owned by the Green Bay & Western railroad.

In August of 1892 a warrant was issued at the request of Police Chief Eastey for the arrest of the motorman on electric car No. 13, for allowing his car to move on Third street, between Kansas and Johnson streets, faster than six miles an hour. This led the city council to pass the Winona street railway speed ordinance, in September, fixing the maximum speed at 12 miles per hour and placing a limit of 6 miles per hour on Third street between Johnson and Kansas, on Center from 3rd to 5th, on Johnson from 2nd to 4th and on 2nd from Johnson to Huff. The penalty for violation of the ordinance was fixed at no less than a fine of \$50 or imprisonment for 60 days.

The Northern Car Company never rebuilt after its car building facilities were destroyed by fire so the streetcar company ordered two open cars from the St. Louis Car Company, and received delivery of these cars late in October of 1892. Since the open car

season had already come to a close, the two cars were stored in the car barn until the next season would open in May.

By the fall of 1893 the company had acquired two more closed cars. Since the cars were numbered from 10 throughwas 14, the new arrivals were numbered 15 and 16. The city paved Third street with brick that year, the street car company laid new rail ahead of the paving and added turnouts which permitted the running of more cars on the line. The system now had nine electric cars --two open and seven closed with five in active service, four on the main line and one on the short line.

The year of 1893 was also the year of the big financial panic which was the cause of the company going into receivership in 1896; it was taken over by the Winona Railway & Light Company in 1897.

The Lake Line and other extensions

During 1900 the city council granted the company the right to remove the tracks on the stub from Johnson and Second to the North Western depot and to construct a trestle bridge across Lake Winona for the purpose of running its cars to the entrance of Woodlawn Cemetery. The right of way was granted through the city starting at the corner of Howard and Center streets, west to Grand street then south on Grand to Sarnia, west on Sarnia to either Olmstead, Dakota or Sioux, whichever is the most practical, then south on that street, crossing the lake to the highway on the south side of the lake near the cemetery.

The Howard street extension was completed to the lake, but the construction of the bridge was delayed until the lake froze solid enough to support the bridge building equipment.

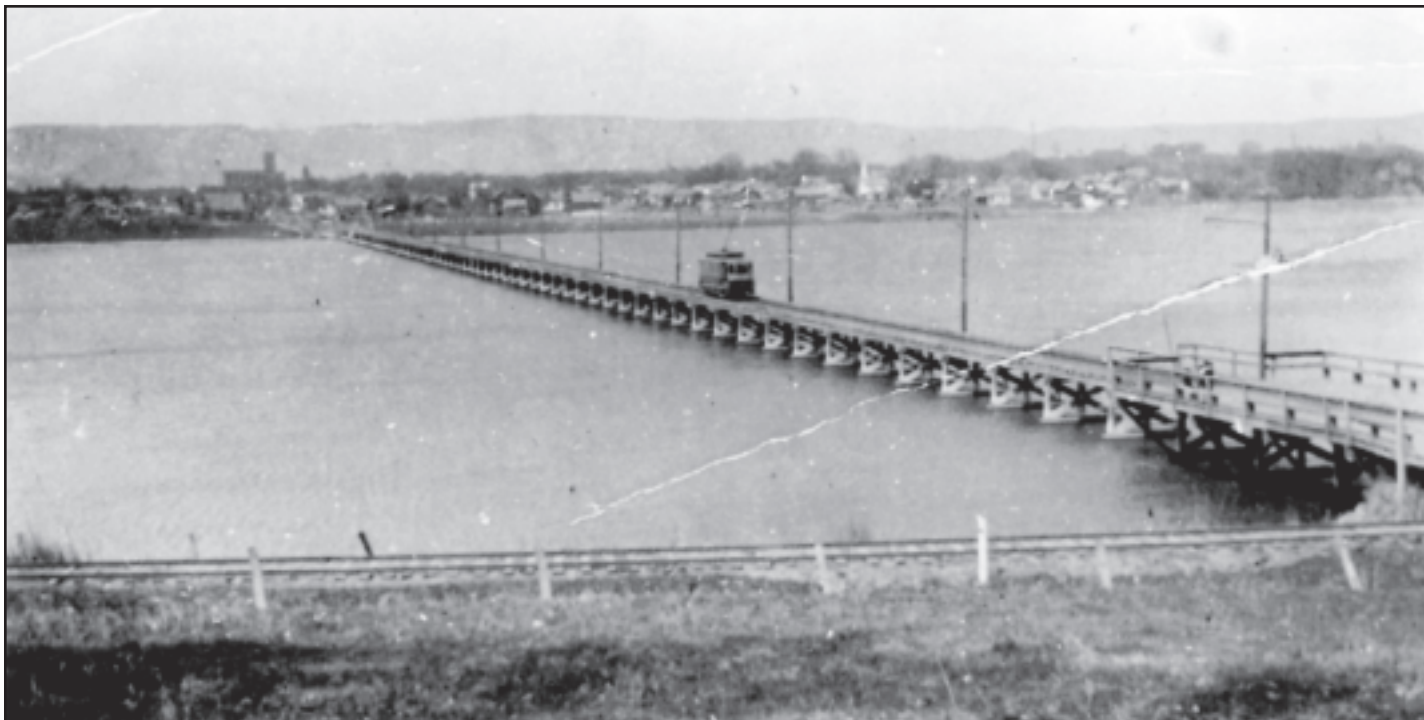


At this time another street car, No. 17, was added to the roster for use on the new line. The trestle was completed in February and the rails were extended to the southern terminus platform at the Chicago Great Western Railway track. The original plan called for a crossing at this point with the car line extending westerly to a company operated amusement park, but the CGW Ry would not allow the street car line across its tracks. So the car line served Woodlawn Cemetery and Bluffside Park and its dance pavilion. The car company also had an outdoor theater where free movies were shown by the company to stimulate patronage for the line in the same area.

The year 1902 saw the arrival from Chicago of another street car to augment the local streetcar system. This car was numbered 18. The open cars were motorized only in the summer season as the motors were transferred to the snow sweeper in winter.

The Meadow-Brook Golf Club, which was located in the area south of Fifth street and west of Hilbert and extending south to Gllmore road, had been seeking an extension of the west Fifth street line. This was realized when the city council granted permission to the WR&LCo to extend its tracks to the Golf Grounds, the company being required to operate cars on the extension only from April 15 to November 1 each year. The extension was completed in 1903.

The next extension was one of 24 blocks starting at Center street on



The Lake Line's rather audacious crossing of Lake Winona ended abruptly because it couldn't continue beyond the Chicago Great Western tracks. Passengers walked the rest of the way to Woodlawn Cemetery and Bluffside Park. Winona County Historical Society collection.



This view shows the Lake Line's relationship to Woodlawn cemetery and Bluffside Park. Winona County Historical Society collection.

Sanborn east to High Forest then north to the end of the Third street line to complete the loop with turnouts located on Sanborn between Center and LaFayette, on East Third between Carimona and Zumbro and on West Fifth between Dakota and Olmstead, An "East Side" loop line was begun, using two cars on the line. The Main

line cars then operated down the Fifth street line to Center, south to Howard then west and across the lake. Before the completion of the east end loop in 1906, a street car built by the Pullman Car Company, numbered 20, arrived in Winona. A 42'x87" addition to the car barn was also built in 1906. The repair shop was moved to this section.

Car 14, which had been converted to a trailer several years before because the "old red car" was considered the "hoodoo car" of the fleet, now was completely rebuilt and re-numbered 19. Two closed cars, 21 and 22, were received from McGuire-Cummings Mfg. Co. in December 1906.

The Hatfield Dam and Power Plant

was built during 1907 on the Black River. When this plant was completed in December it became the main source of power for the street railway with the Winona plant as the auxiliary. At this time two more closed cars, 23 and 24, arrived from McGuire-Cummings making a total of 11 deck roof curved-side closed cars and 2 ten-bench open cars.

Car 20, which was extensively damaged in a collision in 1908, was rebuilt and newly painted only to be destroyed by fire at the railroad crossing on Fifth street in February, 1909. One of the older cars, No. 12, which was being remodeled and refinished at the time was renumbered and became second 20. During this time, a baseball park was constructed on the old fair grounds so a branch line from Fifth and Summit was built to the grandstand in the park.

With the loss of one car by fire and the retiring of No. 11 because of its poor condition the company was short of cars in 1910. Two single truck closed cars, 25 and 26, were purchased from Chicago Railways Co. late in the year. A short time later Car 17 was destroyed in a train collision at the Dakota street crossing on May 24, 1911. The car was empty and the motorman jumped to safety. In June two new single truck, closed cars, 27 and 29, which had been ordered from the John Stephenson Co. reached Winona. About this time the wooden trestle bridge crossing Lake Winona was declared unsafe for rail traffic and was converted to a foot bridge and the Lake line ended at the lakeshore.

New owner, Winona #10 arrives and expansion plans

The Wisconsin Railway, Light and Power Company, organized in January 1913, acquired both the Winona

Railway and Light Company of Winona and the La Crosse City Railway. Four modern steel cars were ordered from St. Louis Car Company. Numbered 9 thru 12, 34' 4" long and painted yellow, these cars arrived in March 1914. (*This order included our No. 10.*) Eight of the old cars were retained, painted yellow and re-numbered 1 thru 8.

Through the years proposed construction called for an electric interurban railway from Winona through Galesville to La Crosse. Although franchises had been obtained, no actual work was ever undertaken. At one time a map was published showing the route with a connecting line to Eau Claire, Wis.

An extension of the city's street railway lines was proposed in 1894 by Andrew Hill the general manager of the streetcar company. He announced the city council had granted permission to lay a track along Howard street between Center and Huff. The building of this track was to be but a beginning and by stopping at Huff it was thus left open to diverge either across the lake to the Woodlawn Cemetery or in some other different direction. The benefit to be derived by the city from its suburban districts and population when rapid transit was provided would be realized with a line of street railway built from Huff street straight thru to the Sharpshooters' Park about a block north of Beck's in Gilmore Valley, swinging up to the Minnesota City road and then turning back, connecting with the west end of the Fifth street line. Winona could then do its own "swinging round the circle" all within itself. Overtures had also had been made to build from the east end of the track south along Mankato Avenue to Sugar Loaf with its historical association. The general manager said his aim

was to give Winona as complete a plant and as efficient service as could be found anywhere.

Six years later an extension of the Depot line was proposed west on King street, Grand street, then south to Sarnia, west to Sioux then south across the lake. The city council designated Howard street instead of King but retaining the remainder of the route, the line actually was built along Howard straight through to Dakota, and across the lake. A real estate development prompted the proposed extension in the form of a loop around the tract starting at Fifth and Bierce, north to the railroad tracks, parallel to the railroad tracks to Orrin street, south to Fifth and continuing east to the end of the W. Fifth street line early in 1907.

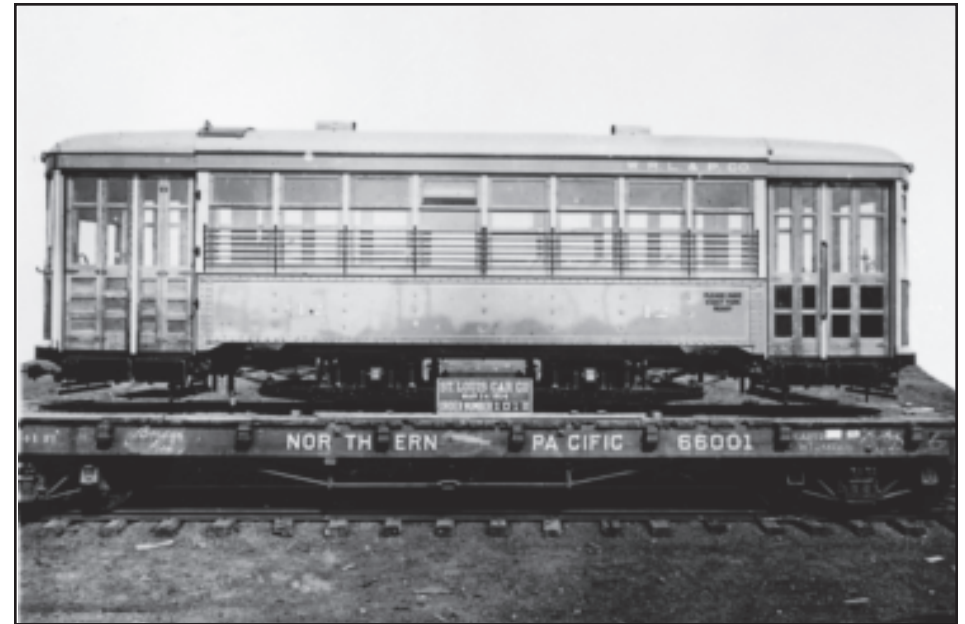
Several sites were being considered for a new baseball park for Winona's entry in the Minnesota-Wisconsin League, one being just beyond Saint

Mary's Cemetery at Sugar Loaf. As a result, an extension was proposed in 1909 from High Forest and Sanborn east to Mankato Avenue, south on Mankato to Bellevue then to Sugar Loaf on private right of way on the east side of Mankato Avenue Dike.

In 1910 an extension of the East End Loop from High Forest and Sanborn east to Chatfield, north with a turnout on Chatfield to Third then west to connect at High Forest was proposed.

Four more modern steel cars similar to the previous order were received from the St. Louis Car Co. in September 1916. These cars were slightly different being heavier, about 2' longer and 7" wider. The cars were numbered 13 thru 16.

The Lake line ran from Third and Center, south on Center to Howard, west to Dakota then south to the lake. Two of the older, smaller cars provided the service, meeting at the turnout



Winona 12, No. 10's sister, gets its picture taken at the St. Louis Car Company plant before shipping out. Washington University collection.



between Huff and Harriet streets. The Main line ran from W. Fifth at Lee St. east on Fifth, north on Johnson, east on Third, south on High Forest, west on Sanborn, north on Center to Third and returned on the same route. Five cars provided the service, meeting at the various turnouts with two Main line and one Lake line car making meets at Third and Center on each trip running on a twelve minute headway. The eight large steel cars were assigned to the Main line. Service on both lines required a total of 7 cars. Extra cars were run in rush hours on the "double-header" method, an extra car following immediately behind a regular car.

On May 16, 1918, The Milwaukee Road "Fast Mail", running 20 minutes late, struck Car 3 broadside on the Dakota St. crossing smashing the car, killing two passengers and injuring seven. As the track at the crossing was considered in poor condition, the decision was made to remove it and abandon the line south of the railroad tracks becoming effective June 1, 1918.

A few years later car 12 spread the rails while making the turn into Dakota on Howard. Because of the sandy street it took about a day to re-rail the car with the curved rails being removed in the process; the remaining track on Dakota street was abandoned.

New color scheme

In June, 1918, the company announced a new tri-color paint scheme was to be adopted to relieve



Cars 9-12 were still new when these photos of #12 and #11 were taken. Note the pinstriping still in place, unlike the later view of #10 on the next page. As delivered in 1914, these cars had only hand brakes. Air brakes were added in 1916. Winona County Historical Society collection.



Here's our #10 on the Main Line, probably around 1920. Winona County Historical Society collection.

the monotony of the old yellow cars. The cars would be similar in color to those used in La Crosse. The end and side panels would be dark green, window and door posts and letterboard yellow and flame red roofs. Apparently only the steel cars 9 thru 16 were painted the new color scheme,

since the curve-side cars 1 thru 8 still retained the yellow scheme until they were retired in the 1920's.

Deck roof cars 35, 36 and 37 arrived from La Crosse for use on the Lake line replacing some of the older curve-side cars. These cars had been built by the St. Louis Car Co. in 1903, were 33'2" long and seated 32 persons. After several years of service 36 was retired, the body being converted into a garage. Car 35 was scrapped soon after and 37 was wrecked by a falling tree in a late

1920's sleet storm on the Lake line at the Johnson street intersection.

About 1925 two steel cars, 49 and 50, were transferred from La Crosse for use on the Lake line. These cars were built by the St. Louis Car Co. in 1912 and were almost identical to cars 9 thru 12. After serving a year or two on the Lake line the two cars were remodeled to match the 9-12 cars and were re-numbered 7 and 8.

Mississippi Valley Public Service

In January, 1926, the corporate name was changed to Mississippi Valley Public Service Company. A new paint scheme was devised, the body painted french grey, windows delphinium blue and roof black, with a white "flare" painted on the dashes. Trim and striping was black.

Two single truck, double end, Birney cars numbered 1 and 2 were acquired from the Menominee and Marinette Light and Traction Co. (Wis.) in 1928. They were built by St. Louis Car Co. in 1924, measured 28' long and 7'8" wide and seated 32. They were repainted and re-numbered 5 and 6 and assigned to the Lake line.

About 1930 the entire fleet of cars, except 12, was repainted again to a new color scheme of orange body, cream windows, red trim, black lettering, red-orange or black roof and white "flare" on the dashes. (*This is the scheme Winona #10 wears today.*) Car 12, in the poorest condition, was retired and the body became a 4-H club house at Farmers Community Park between Stockton and Lewiston, Minn. About 1934 the white "flare" on the dashes was eliminated, and this color scheme was retained until the end of streetcar service.

The last years

The Streetcar Franchise was to expire in June, 1933 and the city council received an offer of Beyerstedt Brothers Company proposing to eliminate street cars and operate only buses. H. M. Howard, general manager of the MVPSCo, asked for a year by year franchise renewal as the company was anxious to continue economical operation of the street cars. He stated "the street car system has been operated for many years at a slight cost to the MVPSCo but because operating of the



Above: This is the passing siding on 3rd Street between Center and Johnson Streets, around 1920. Note the track to the car barn at left.

Opposite page top: Looking down Washington Street from the Mississippi River bridge. Bottom: This may be all the company's motormen. Winona County Historical Society collection.



street car system brings an advantage to the company in utilization of surplus electric power created here the company is willing and anxious if it is allowed to operate economically, to continue its transportation service. For the last three years the street car lines of the company have failed to earn enough to meet operating expenses and taxes. They failed by \$683 in 1930, by \$3,694 in 1931 and by \$3,150 in 1932. Before that they just about provided enough revenue to meet operating expenses and taxes and to provide some write-off for depreciation."

"The street car business reached its peak in 1920 and since then the trend has been steadily downward right through the boom years. The decline in earning power of street car lines has not come because of the depression,

but because of the increased use of automobiles."

"With changes I have suggested to the council I think the lines here could still be made to earn operating expenses and taxes. A street car system is still a necessary public service in Winona shown by the fact that we carried 850,000 passengers last year. The company would like to keep on furnishing this necessary public service. We are a reliable concern and closely identified with the city and its growth, we have a substantial investment in our lines which we would not like to lose."

An experimental bus line was begun July 2, 1933, replacing streetcars on the Lake line. On October 20th of that year the track on the Lake line was officially abandoned. The Main line was also shortened, track was abandoned on Center from Third to Sanborn, on Sanborn from Center to Laird on the east side and on W. Fifth from Lee to Hilbert on the west side. Twelve minute service was then operated by streetcars on the Main line with one





This is the 1930 color scheme of orange, cream and red trim, with white triangles on the dash that we've painted car 10. Winona County Historical Society collection.

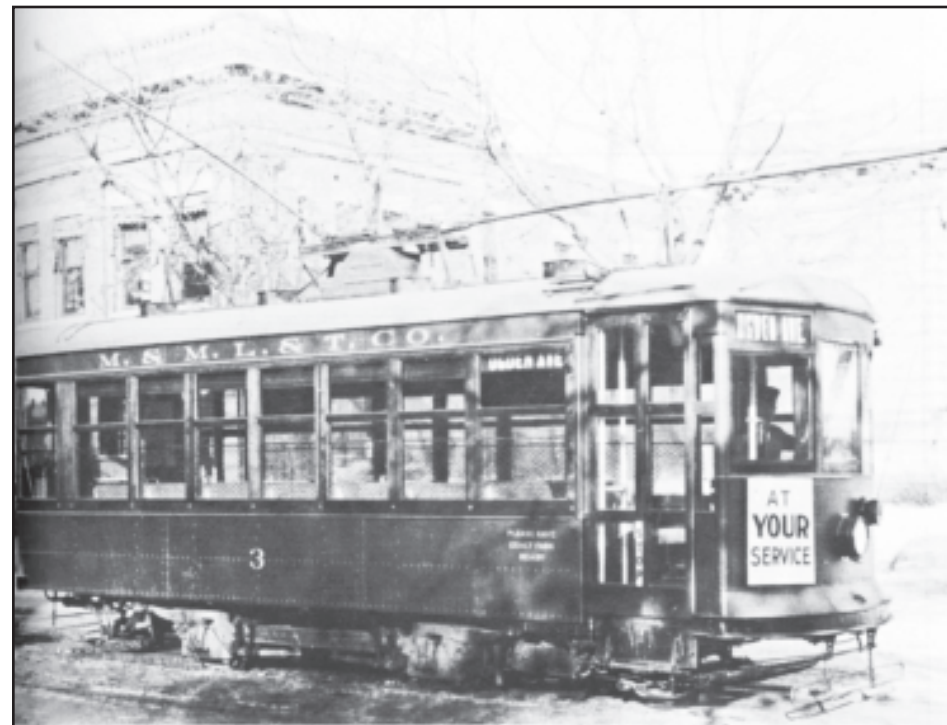


Trolley fan Frank Butts visited Winona in 1936 and took these photos. Top: Car 14 is at the west terminus of the Main Line at 5th and Lee Streets. Note that the white dash triangles have been removed as an economy measure.

bus on the Lake line providing 20 minute service. There were six cars left by 1934, and by 1938 only four cars, 9-11 and 14 remained.

Friday, July 21, 1938, was the last full day of streetcar operation on the

Main line. The very last run was made by car 10, with Joseph McCormick as motorman, pulling into the car barn from the east end of the line just about midnight thus bringing Winona's streetcar era to a close.



Mississippi Valley Public Service also ran the La Crosse streetcar system and sometimes moved equipment back and forth between the two cities. Here are two examples. Cars 35-37 arrived in 1920 and stayed for 3-4 years. Cars 49 and 50, duplicates of Winona cars, arrived in 1923-24. Renumbered 7 and 8, they were retired in 1930. University of Wisconsin La Crosse collection.

Above: The last year of Lake Line service in 1928 was provided by two second-hand Birneys from Marinette-Menominee Light & Traction.
Below: Car 10 sits forlornly in the barn as the end of Winona streetcars approaches.



Revised Nov. 1978

Winona Streetcars - C. J. Vincent

ROSTER OF ELECTRIC CURVE-SIDE, DECK-ROOF, CARS 10-29
 1892 - WINONA CITY RY 1896 - WINONA RAILWAY & LIGHT 1913 - WISCONSIN RAILWAY, LIGHT & POWER CO

	1892	'93	'94	'95	'96	'97	'98	'99	1900	'01	'02	'03	'04	'05	'06	'07	'08	'09	1910	'11	'12	'13	'14
	5	7	7	7	6	6	6	6	7	7	7	7	7	7	8	9	11	9	8	11	9	9	9 & 4 ar
10	Rebuilt																						
	'02																						
11																							
12																		Rebuilt '09					
																		renumbered 20					
13	Rebuilt																						
	'02																						
14											Trailer												
											1905												

7 (Saint Cloud Car 7 on loan 1893 thru 1895)

15 and 16 (1892 Open Motor Cars one was numbered 15 other numbered 16)

16	Rebuilt										5
	1908										
17	Rebuilt					Rebuilt					Wrecked
	'04					'07					1911
18	Trailer										
	'til '04										

YEAR	CLOSED CARS	OPEN CARS	TOTAL CARS	TRAILERS			
				CLOSED	OPEN		
1892	5	2	7	10*		Horsecars stored in horsecar barn	21
1894	7	2	9	10			
1896	6	2	8	10			22
1898	6	2	8	9			
1900	7	2	9	9	2	Horsecar used as pass- enger shelter at end of Fifth Street Line	23
1902	7	2	9	1	2		
1904	7	2	9	1	2		24
1905	7	2	9	1	2*		
1906	8	2	10		2		25
1908	11	2	13		2		
1909	9	2	11		6	" 8 of the 9 closed cars were repainted and renumbered 1-8 with 16 becoming No. 5 and 26 retaining its number and became the spare car in 1912	" 26
1910	8	2	10		6		
1911	11	2	13		6		2-
1912	9	2	11		6		7

1913 - WISCONSIN RAILWAY, LIGHT & POWER CO

1926 - MISSISSIPPI VALLEY PUBLIC SERVICE CO

	1913	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34	'36	'38	
Deck	9	13	13	16	16	15	15	17	14	11	12	12	11	10	10	12	12	12	9	9	9	9	7	6	
1	Ex-21										1 M&MT Birney renumbered 5														
2	Ex-22										2 M&MT Birney renumbered 6														
3	Ex-23					Train Wrecked																			
4	Ex-24																								
5	Ex-16										5 Ex-M&M 1														
6	Ex-25										6 Ex-M&M 2														
7	Ex-27										7 Ex-LaX 49														
8	Ex-29										8 Ex-LaX 50														
Arch	9																								
10																									
11																									
12																									
13																									
14																									
15																									
16																									
26	DR, CS		Deck Roof, Wood		35	Ex-LaCrosse																			
			" " "		36	Ex-LaCrosse																			
			" " "		37	Ex-LaCrosse																			
			Arch Roof, Steel		49	Ex-LaX																			
			" " "		50	Ex-LaCrosse																			

Restoring Winona 10

It was 1998 when we first learned that a Winona streetcar body was available. Car #10 has been delivered by St. Louis Car Company in 1914. It was one of the last four cars to close out streetcar service and made the final trip before abandonment on July 21, 1938. Like several of the other cars, the stripped body was sold. #10 became a cabin outside of town and there it stayed until the owner decided to sell it.

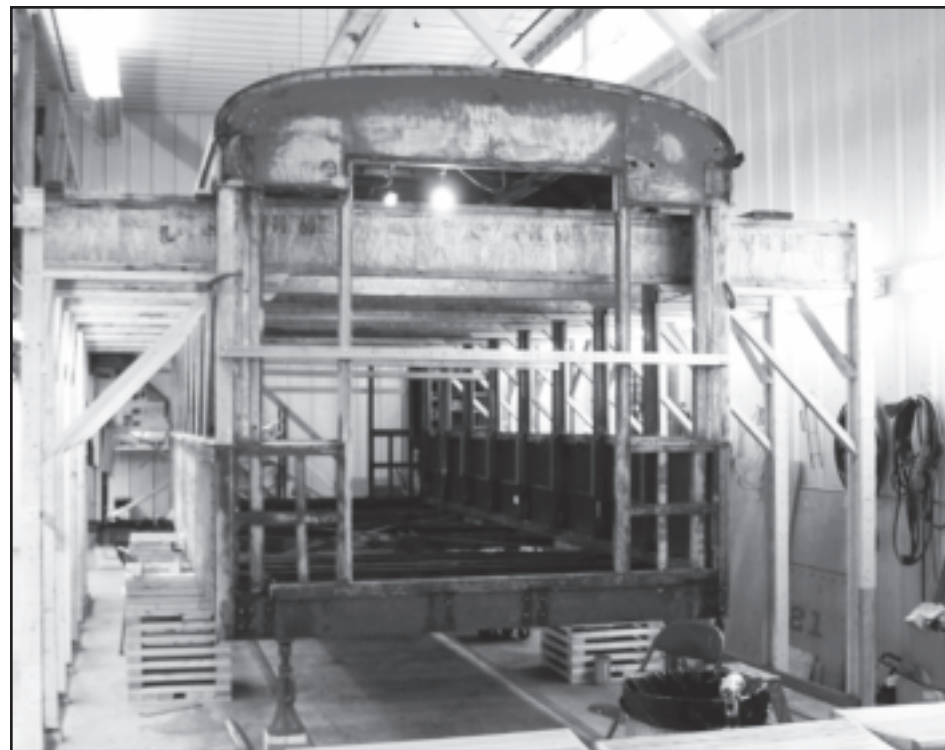
MSM, then part of the Minnesota Transportation Museum, purchased the body a year later. It survived as well as it did because an extra roof was built over it. One of the motorman's foot gongs was even intact and functional under the floor.

Our volunteers removed the non-streetcar portions of the cabin and transported the body to the Excelsior carbarn. Restoration began in 2004.

Restoring a stripped carbody to operation is a very long, difficult process. Imagine restoring an automobile that has no engine or transmission, no wheels and no interior. That's what you're up against. And unlike restoring said automobile, there are almost no other survivors to serve as parts sources, let alone companies making replica parts.

Thankfully, the project attracted volunteers who were up to the task. Retired shop teacher Ken Albrecht emerged as the project leader. Ken combined terrific technical knowledge with an insatiable curiosity that only increased when faced with a difficult challenge. One of his earlier achievements was reverse engineering car 1239's rear steps and gate mechanism, a fiendishly complex problem.

Thankfully, the original plans for Winona #10 still existed, because Washington University in St. Louis had preserved the St. Louis Car



Left: Car 10 being removed from its surrounding cabin.

Above: Its underframe and end platforms removed, the body was suspended from a framework to straighten it before installing the new underframe.



Company files. Also in St. Louis, at the Museum of Transport, was a St. Louis-built car with the same seats as Winona #10. They served as a pattern for replication.

The first chore was disassembling the car and cataloguing all the parts. Once removed, the doors, windows, wainscoting and other wood parts were repaired, refinished and set aside for future reassembly.

The vestibules/end platforms were removed from the main car body and the body was separated from the frame. Although much of the body was well preserved, the steel underframe had rusted badly and was no longer viable. Volunteer Howie Melco fabricated a replacement underframe.

Like any old wood structure, the car body was no longer square. It was suspended from a structural frame and gradually straightened, before being lowered onto the new steel underframe.

The roof was rebuilt. Selected rotted roof boards were replaced and a new oxide red canvas roof was installed, along with new roof running boards. The rebuilt vestibules were reattached.

Rebuilding the folding door mechanisms was a major job. New hardware had to be fabricated. Reverse engineering and fitting the complicated linkage between the motorman's door handles and the doors themselves was extremely challenging. The exterior steps fold down when the doors are

opened, an additional complication.

Winona 10 represents the period between all-wood and all-steel streetcar construction. The underframe is steel, but the body is wood, sheathed in sheet steel. Not surprising, the steel siding was rusted and needed partial replacement.

While all the body work was happening, the rare Dupont power truck was at Lyons Industries in Pennsylvania being rebuilt. Because it was an earlier, lighter version than the one originally under Winona 10, it had to be lengthened and strengthened. The motors were sent out to AC Electric in Maine for rebuilding and reinstalled in the truck by Lyons.

The truck was returned and the body was lowered onto it. Next came painting. During its life Winona 10

wore four different color schemes. We settled on the orange, cream, red and white Mississippi Valley Public Service version from the early 1930s. MVPS also owned the La Crosse system, which shared the same color scheme.

Before the interior could be installed, the car had to be rewired, another extremely complex task. When that was done, a new subfloor was laid down, and the floor placed atop it. The center aisle features numerous horizontal grooves running lengthwise. This was a common device in cold climates to drain away melted snow and ice from the walking surface.

Winona 10 was missing some hardware, including the circular ceiling ventilators that could be opened, closed and adjusted to regulate air

Below: Howie Melco and Scott Heiderich with the new steel underframe.
Right: Doors, windows and wainscoting were removed and refinished early in the restoration.



flow in the car. Thankfully, the body of sister car #9 still survives in Winona. The owner permitted us to remove parts from it. They were reconditioned and are part of the new ceiling. Electric Twin City-type heaters were installed.

The first operational test was November 29, 2016, 78 years after it last ran in Winona. The first passengers were carried on October 6, 2017, as part of the HeritageRail Alliance

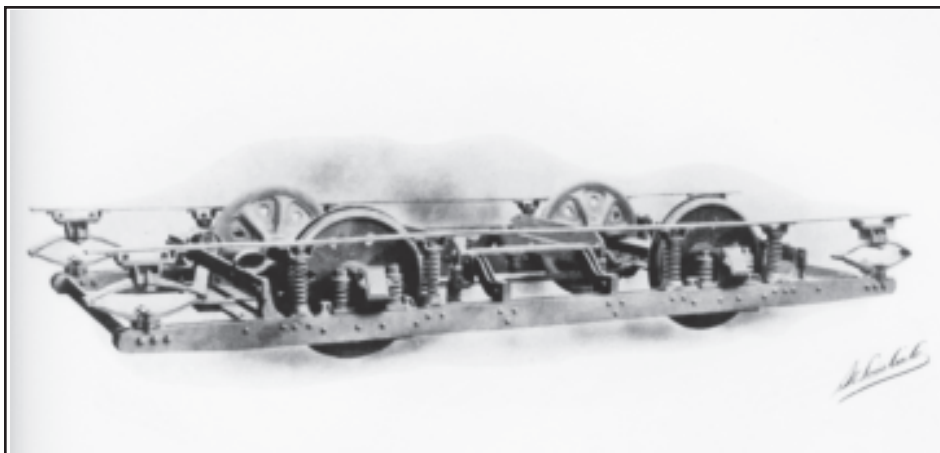
conference.

With any restoration there are numerous small punch list items to complete even though the car is operational. One finishing touch was the creation of interior car cards. There weren't any originals available, so Bill Graham collected the text from vintage Winona newspaper ads in the Winona County Historical Society collection. Rod Eaton combined the text with appropriate graphics. The result is not meant to be an historically accurate replication, but does capture the ad style of the period featuring real Winona businesses from the streetcar era.

The DuPont Truck

Arguably the hardest part of turning a stripped car body into an operating streetcar is either finding or building an appropriate power truck. At trolley museums across North America there are many stripped bodies that were made into cabins, diners, farm outbuildings and who knows what else. Unfortunately, the supply of appropriate power trucks falls way short of the number of waiting car bodies. Today the only sources are trucks that were removed from retired rapid transit cars, streetcar system work cars, and some American-built or American-style trucks from other countries. A couple of museums have built new replica trucks, but that's a difficult and expensive undertaking.

Our car 265 rides on Japanese copies of American Brill trucks that became available when the Osaka transit system scrapped their 1920s vintage rolling stock. They don't resemble the correct Twin City #6 trucks, but they are close to trucks used by earlier TCRT cars. The trucks under car 1239 came from Chicago L cars built in the 1920s and retired in the 70s. They look



Above: The Dupont 46 truck, minus motors.

Below: The truck under Winona 10 came from Lancaster, Ohio converted horse car #6. The car survived and was acquired by the Ohio Historical Society, which backdated it to a horse car. The detached truck went to the Trolleyville collection and we were able to purchase it when trolleyville folded.



somewhat like 1239's original Baldwin #5 trucks.

The truck under car 78 is a Brill 21E salvaged from a Brussels, Belgium car. It bears a passing resemblance to the original, but is much more powerful. We have a pair of trucks for Mesaba

#10 that are Japanese copies that closely match the car's original Baldwin 78-22-A's.

When Winona 10's restoration began, MSM acquired another Belgian 21E from the East Troy Electric Railway. It didn't look at all like the

car's DuPont 46 truck, but the chance of scoring a DuPont seemed nil. There were only three DuPonts in existence, and two of those are under their original streetcars in other museums.

The third DuPont truck, however, was detached and we were eventually able to purchase it. It was a shorter, lighter version called a DuPont 35. It dated from the mid-1890s and how it came to be available is a surprising story of survival and serendipitous timing.

But first some background on the DuPont truck.

Referred to as the DuPont Style C, the truck was designed in 1894 or 1895 by Alfred DuPont, who headed the Detroit transit system. He had designed his first truck a few years earlier when he worked for the Louisville system. The Style C was manufactured by the Johnson Steel Company and later by the St. Louis Car Company, which called it the St. Louis 35 truck. The St. Louis 46 truck was a later DuPont design, and that is what was under Winona 10. However, the 46 was simply a more robust version of the 35. Both models shared the same components.

St. Louis Car manufactured the two versions of the DuPont truck from 1901 to 1916. Winona cars 9-12 were delivered in 1913. Winona cars 13-16, delivered in 1916, were the last of 334 St. Louis-built cars to receive the DuPont truck.

Getting back to our truck, it was originally purchased by the Columbus, Ohio streetcar system to convert a former horse car into an electric car. That car was sold in 1896 to the Lancaster (Ohio) Traction Company as their #6. It ran until 1937 when Lancaster converted to bus. The Bolton family that owned the Lancaster system saved #6 and open car #3. The

cars remained in storage until donated in 1996 to the Ohio Historical Society. OHS restored #6, backdating it to its original horse car appearance and placing it on display.

That made the power truck surplus and it was obtained by the privately owned Brookins Museum of Electric Railways, better known as Trolleyville, in Olmstead Falls, Ohio. Trolleyville was located in, of all places, the mobile home park that Brookins had developed in the 1950s.

After Brookins died, his family sold the mobile home park in 2001 and the new owner gave them five years to remove the trolley museum. Numerous sites were explored but none panned out. Eventually the collection was stored in a city-owned warehouse on the Cleveland waterfront and the museum rebranded itself as the Lake Shore Electric Railway Museum. They attempted to raise the money needed to establish a permanent presence on the lake shore, next to the local science museum and the Rock N Roll Hall of Fame, among other attractions. Unfortunately, the Great Recession had hit and the plan never got off the ground.

The collection was sold off, and MSM was able to buy the power truck. Being a model 35 rather than a 46, it had to be lengthened and strengthened and otherwise restored by contractor Lyons Industries. And that's how the planets aligned to give Winona #10 the correct power truck.

Volunteers made it happen

During the 19 years since Winona 10 was acquired, many MSM members have participated in the restoration.

Here's the all-time list, alphabetized.

Ken Albrecht, Project Leader
Earl Anderson
Carl Barthelemy
Erik Brom



Above: The new roof is on and the car is primed.

Right: Part (but not all) of the restoration crew: Left to right are:

First Row: Scott Ingram, Scott Heiderich.

Second Row: Carl Floren, Art Ruder, Steve Mages, Dave McCollum, Tom McGruder, Howie Melco. Dick Zawacki photo.

Mark Brothen
Bob Dumas
Rod Eaton
Phil Epstein
Tom Fairbairn
Carl Floren
Dave French
David Gepner
Marsh Ginther
Bill Graham
Lori Hammond
Craig Harders
Mike Harders
Scott Heiderich
John Heinl
Scott Ingram
Aaron Isaacs
Russ Isbrandt
George Ittner
Karl Jones
Mike Kimitch
Dick Kolter
Marv Krafve
Steve Mages
Dave McCollum
Tom McGruder

Mike McWilliams
Howie Melco, Project Leader
Michael J. Miller
Mike Murawa
Jim Murphey
Jerry Olsen
Jim Peschong
Bill Preiss
John Prestholdt
Phil Settergren
Art Ruder
Andy Stephens
Dennis Stephens
Dick Stoner
John Tetterton
Jim Vaitkunas
Larry Wagner
Jim Willmore
Dick Zawacki

Funds for the restoration came largely from MSM members, but we want to thank the Winona Foundation and the 20th Century Electric Railway Foundation for their crucial financial support.





The restored interior of Winona #10. This is a double-ended car with controls at both ends. It has walkover seats. The seat backs reverse to face the direction the car is travelling. Trips in Winona were short, only a mile or two, so there were no seat cushions. The grooved floor was designed for ice and snow to melt into the grooves. Dick Zawacki photo.



MINNESOTA STREETCAR MUSEUM

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August 2021

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